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1600

RAW SEQUENCE LISTING

DATE: 10/15/2002

PATENT APPLICATION: US/09/786,635A

TIME: 16:23:15

Input Set : A:\Bayer 10,131 Sequence Listing.txt

Output Set: N:\CRF4\10152002\I786635A.raw

p.b

3 <110> APPLICANT: Bayer AG
 5 <120> TITLE OF INVENTION: ATP binding cassette genes and proteins for diagnosis
 6 and treatment of lipid disorders and inflammatory
 7 diseases
 9 <130> FILE REFERENCE: ATP binding cassette genes and protein
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/786,635A
 C--> 12 <141> CURRENT FILING DATE: 2001-05-22
 14 <150> PRIOR APPLICATION NUMBER: 101706
 15 <151> PRIOR FILING DATE: 1998-09-25
 17 <160> NUMBER OF SEQ ID NOS: 54
 19 <170> SOFTWARE: PatentIn Ver. 2.0
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 22 <211> LENGTH: 6880
 23 <212> TYPE: DNA
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 27 <223> OTHER INFORMATION: cDNA of ABCA1 (ABCI)
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 32 atgccctctg caggaacact tccttgggtt caggggatta tctgtaatgc caacaacccc 180
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 37 aacctctctc tcccaaagtc tactgtggac aagatgctga gggctgatgt cattctccac 480
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 40 aaactggctg cagcagagcg agtacttcgt tccaacatgg acatcctgaa gccaatcctg 660
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 42 ttgctgcata gtcttgggac tctggcccag gagctgttca gcatgagaag ctggagtgc 780
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58 gacaatgtgg agaggacaaa taaaatcaag gatgggtact gggaccctgg tcctcgagct 1680
59 gacccctttg aggacatgcy gtacgtctgg gggggcttcg cctacttgca ggatgtggtg 1740
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61 cagatgccct atccctgtta cgttgatgac atctttctgc gggatgatgag ccggtcaatg 1860
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105 acaggaagaa acatttcgga ttatctggtg aagacgtatg tgcagatcat agccaaaagc 4500
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107 aatactcaag cacttcctcc gagtcaagaa gttaatgatg ccaccaaaca aatgaagaaa 4620
108 cacctaaagc tggccaagga cagttctgca gatcgatttc tcaacagctt gggaagattt 4680
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147 <210> SEQ ID NO: 2

148 <211> LENGTH: 2201

149 <212> TYPE: PRT

150 <213> ORGANISM: Human

152 <220> FEATURE:

153 <223> OTHER INFORMATION: Peptide sequence of ABCA1 (ABCl)

155 <400> SEQUENCE: 2

156 Met Pro Ser Ala Gly Thr Leu Pro Trp Val Gln Gly Ile Ile Cys Asn

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157      1              5              10              15
159 Ala Asn Asn Pro Cys Phe Arg Tyr Pro Thr Pro Gly Glu Ala Pro Gly
160              20              25              30
162 Val Val Gly Asn Phe Asn Lys Ser Ile Val Ala Arg Leu Phe Ser Asp
163              35              40              45
165 Ala Arg Arg Leu Leu Leu Tyr Ser Gln Lys Asp Thr Ser Met Lys Asp
166              50              55              60
168 Met Arg Lys Val Leu Arg Thr Leu Gln Gln Ile Lys Lys Ser Ser Ser
169 65              70              75              80
171 Asn Leu Lys Leu Gln Asp Phe Leu Val Asp Asn Glu Thr Phe Ser Gly
172              85              90              95
174 Phe Leu Tyr His Asn Leu Ser Leu Pro Lys Ser Thr Val Asp Lys Met
175              100              105              110
177 Leu Arg Ala Asp Val Ile Leu His Lys Val Phe Leu Gln Gly Tyr Gln
178              115              120              125
180 Leu His Leu Thr Ser Leu Cys Asn Gly Ser Lys Ser Glu Glu Met Ile
181              130              135              140
183 Gln Leu Gly Asp Gln Glu Val Ser Glu Leu Cys Gly Leu Pro Arg Glu
184 145              150              155              160
186 Lys Leu Ala Ala Ala Glu Arg Val Leu Arg Ser Asn Met Asp Ile Leu
187              165              170              175
189 Lys Pro Ile Leu Arg Thr Leu Asn Ser Thr Ser Pro Phe Pro Ser Lys
190              180              185              190
192 Glu Leu Ala Glu Ala Thr Lys Thr Leu Leu His Ser Leu Gly Thr Leu
193              195              200              205
195 Ala Gln Glu Leu Phe Ser Met Arg Ser Trp Ser Asp Met Arg Gln Glu
196              210              215              220
198 Val Met Phe Leu Thr Asn Val Asn Ser Ser Ser Ser Ser Thr Gln Ile
199 225              230              235              240
201 Tyr Gln Ala Val Ser Arg Ile Val Cys Gly His Pro Glu Gly Gly Gly
202              245              250              255
204 Leu Lys Ile Lys Ser Leu Asn Trp Tyr Glu Asp Asn Asn Tyr Lys Ala
205              260              265              270
207 Leu Phe Gly Gly Asn Gly Thr Glu Asp Ala Glu Thr Phe Tyr Asp
208              275              280              285
210 Asn Ser Thr Thr Pro Tyr Cys Asn Asp Leu Met Lys Asn Leu Glu Ser
211              290              295              300
213 Ser Pro Leu Ser Arg Ile Ile Trp Lys Ala Leu Lys Pro Leu Leu Val
214 305              310              315              320
216 Gly Lys Ile Leu Tyr Thr Pro Asp Thr Pro Ala Thr Arg Gln Val Met
217              325              330              335
219 Ala Glu Val Asn Lys Thr Phe Gln Glu Leu Ala Val Phe His Asp Leu
220              340              345              350
222 Glu Gly Met Trp Glu Glu Leu Ser Pro Lys Ile Trp Thr Phe Met Glu
223              355              360              365
225 Asn Ser Gln Glu Met Asp Leu Val Arg Met Leu Leu Asp Ser Arg Asp
226              370              375              380
228 Asn Asp His Phe Trp Glu Gln Gln Leu Asp Gly Leu Asp Trp Thr Ala
229 385              390              395              400

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231 Gln Asp Ile Val Ala Phe Leu Ala Lys His Pro Glu Asp Val Gln Ser
232          405                      410                      415
234 Ser Asn Gly Ser Val Tyr Thr Trp Arg Glu Ala Phe Asn Glu Thr Asn
235          420                      425                      430
237 Gln Ala Ile Arg Thr Ile Ser Arg Phe Met Glu Cys Val Asn Leu Asn
238          435                      440                      445
240 Lys Leu Glu Pro Ile Ala Thr Glu Val Trp Leu Ile Asn Lys Ser Met
241          450                      455                      460
243 Glu Leu Leu Asp Glu Arg Lys Phe Trp Ala Gly Ile Val Phe Thr Gly
244 465          470                      475                      480
246 Ile Thr Pro Gly Ser Ile Glu Leu Pro His His Val Lys Tyr Lys Ile
247          485                      490                      495
249 Arg Met Asp Ile Asp Asn Val Glu Arg Thr Asn Lys Ile Lys Asp Gly
250          500                      505                      510
252 Tyr Trp Asp Pro Gly Pro Arg Ala Asp Pro Phe Glu Asp Met Arg Tyr
253          515                      520                      525
255 Val Trp Gly Gly Phe Ala Tyr Leu Gln Asp Val Val Glu Gln Ala Ile
256          530                      535                      540
258 Ile Arg Val Leu Thr Gly Thr Glu Lys Lys Thr Gly Val Tyr Met Gln
259 545          550                      555                      560
261 Gln Met Pro Tyr Pro Cys Tyr Val Asp Asp Ile Phe Leu Arg Val Met
262          565                      570                      575
264 Ser Arg Ser Met Pro Leu Phe Met Thr Leu Ala Trp Ile Tyr Ser Val
265          580                      585                      590
267 Ala Val Ile Ile Lys Gly Ile Val Tyr Glu Lys Glu Ala Arg Leu Lys
268          595                      600                      605
270 Glu Thr Met Arg Ile Met Gly Leu Asp Asn Ser Ile Leu Trp Phe Ser
271          610                      615                      620
274 Trp Phe Ile Ser Ser Leu Ile Pro Leu Leu Val Ser Ala Gly Leu Leu
275 625          630                      635                      640
277 Val Val Ile Leu Lys Leu Gly Asn Leu Leu Pro Tyr Ser Asp Pro Ser
278          645                      650                      655
280 Val Val Phe Val Phe Leu Ser Val Phe Ala Val Val Thr Ile Leu Gln
281          660                      665                      670
283 Cys Phe Leu Ile Ser Thr Leu Phe Ser Arg Ala Asn Leu Ala Ala Ala
284          675                      680                      685
286 Cys Gly Gly Ile Ile Tyr Phe Thr Leu Tyr Leu Pro Tyr Val Leu Cys
287          690                      695                      700
289 Val Ala Trp Gln Asp Tyr Val Gly Phe Thr Leu Lys Ile Phe Ala Ser
290 705          710                      715                      720
292 Leu Leu Ser Pro Val Ala Phe Gly Phe Gly Cys Glu Tyr Phe Ala Leu
293          725                      730                      735
295 Phe Glu Glu Gln Gly Ile Gly Val Gln Trp Asp Asn Leu Phe Glu Ser
296          740                      745                      750
298 Pro Val Glu Glu Asp Gly Phe Asn Leu Thr Thr Ser Val Ser Met Met
299          755                      760                      765
301 Leu Phe Asp Thr Phe Leu Tyr Gly Val Met Thr Trp Tyr Ile Glu Ala
302          770                      775                      780
304 Val Phe Pro Gly Gln Tyr Gly Ile Pro Arg Pro Trp Tyr Phe Pro Cys

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RAW SEQUENCE LISTING ERROR SUMMARY
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 8,109,360,586,636,637,638,1040
Seq#:4; N Pos. 944,950,957,970,1001,1002,1003,1007
Seq#:13; N Pos. 4208,4210,4211,4212,4227,4228,4229,4231,4253,4677,4691,4707
Seq#:13; N Pos. 4721,4752,4754,4772,4773
Seq#:20; N Pos. 5,2909
Seq#:25; N Pos. 1963
Seq#:31; N Pos. 856,1009,1128,1314,1326,1328,1343,1345,1346,1378,1415,2477
Seq#:31; N Pos. 2540
Seq#:54; N Pos. 856,1009,1128,1314,1326,1328,1343,1345,1346,1378,1415,2477
Seq#:54; N Pos. 2540

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:11; Line(s) 1029
Seq#:31; Line(s) 1992
Seq#:54; Line(s) 2297